

What is claimed is:

1. A gas distribution apparatus for supplying gas into a semiconductor wafer processing chamber, the apparatus comprising:

a body having a bottom wall and a plurality of gas inlets extending through the bottom wall; and

an injection plate to be screwed with the bottom part of the body, the injection plate having small and large diameters of ring-shaped grooves on its upper surface to connect the gas inducing inlets, the grooves having injection holes formed at a predetermined interval for downward penetration.

2. The apparatus, as defined in claim 1, wherein the gas inducing inlets are formed at different distances from the center of the bottom part of the body.

3. The apparatus, as defined in claim 1, wherein the gas inducing inlets upwardly protrude from the body.

4. The apparatus, as defined in claim 1, wherein the external periphery of the upper portion body is fastened to the chamber.

5. The apparatus, as defined in claim 1, wherein the body includes the gas inducing inlets with a vertically extended diameter for downward penetration.

6. The apparatus, as defined in claim 1, wherein the injection plate is fastened with the bottom part of its external periphery to the bottom surface of the body with a plurality of screws.

7. A gas distribution apparatus of semiconductor equipment to supply gas into a chamber for a plasma etching process, the apparatus comprising:

a body having a plurality of gas inducing inlets and cooling water means on a downward grooved side of its plate; and

5 an injection plate attached to the bottom surface of the body, the injection plate having small and large diameter ring-shaped grooves on its upper surface to connect the gas inducing inlets, the grooves having injection holes formed at a predetermined interval for downward penetration.

8. The apparatus, as defined in claim 7, wherein the gas inducing inlets are formed at different diameters from the center of the bottom part of the body.

9. The apparatus, as defined in claim 7, wherein the gas inducing inlets are upward protruded from the body.

10. The apparatus, as defined in claim 7, wherein the external periphery of the upper portion body is fastened to the chamber.

11. The apparatus, as defined in claim 7, wherein the body has the gas inducing inlets with a vertically extended diameter for downward penetration..

12. The apparatus, as defined in claim 7, wherein the injection plate is fastened with the bottom part of its external periphery to the bottom surface of the body with a plurality of screws.

13. The apparatus, as defined in claim 7, wherein the cooling means includes injecting and discharging holes for inducing and discharging cooling water and a cooling

water path connecting the injecting and discharging holes for circulating cooling water in the body.

14. The apparatus, as defined in claim 13, wherein the injecting and discharging holes are upwardly protruded from the bottom part of the body.